IMPACT OF THE ALTERNATIVE BASE PERIOD ON EMPLOYERS

(Volume III)

by

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This volume, **Impact of the Alternative Base Period on Employers**, was prepared by Planmatics. It is one of six volumes on the evaluation of the alternative base period for unemployment insurance, conducted by Planmatics for the U.S. Department of Labor Contract No. K-54355008030. **Volume I, Summary of Findings on the Alternative Base Period,** summarizes the information presented in Volumes II through VI. **Volume II, Impact of the Alternative Base Period on Administrative Costs**, contains descriptions of the processes and procedures resulting from implementing ABP and estimates of implementation and administrative costs. **Volume III, Impact of the Alternative Base Period on Employers**, contains analyses of the effects of ABP on employers and descriptions of reporting formats and mediums used. **Volume IV, Impact of the Alternative Base Period on the Trust Fund,** contains analysis and simulations of the impact of ABP on the trust fund in five states. The Urban Institute was responsible for the contents of this volume as a subcontractor to Planmatics. **Volume V, Demographic Profile of UI Recipients under the Alternative Base Period,** contains descriptions and analyses of workers eligible for unemployment insurance in New Jersey and Washington and comparisons with regular UI recipients. **Volume VI, Handbook for States Implementing the Alternative Base Period**, contains information on lessons learned from states with alternative base periods and provides guidelines on how to design and implement such systems.

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1. INTRODUCTION

1.1 BACKGROUND

In states where unemployment insurance eligibility is determined under alternative base period (ABP) provisions, employers may experience increased costs. These costs can be separated into two categories: increases in UI taxes and additional administrative costs related to the processing of wage requests.

Experience-rated taxes may increase because more claimants become eligible under the ABP provisions. This issue is discussed in Volume III of this report, "Effect of Alternative Base Period on the Trust Fund."

Employers may also incur administrative costs in responding to requests for wage information on ABP claimants when the required information is not available in the database of the state UI agencies. Additional operating costs are also generated if the UI agency decides to change the timing and/or the method of the quarterly reporting. These costs vary with the size and the type of employer, and the type of payroll system used.

This report contains an analysis of the impact of the ABP on employers' administrative costs: reporting burden, timing, and methods of wage reporting. Issues relating to administrative costs incurred by the state UI agencies when ABP provisions are adopted are presented in Volume II of this report, "Impact of the Alternative Base Period on Administrative Costs."

1.2. OBJECTIVES

The objectives of this employer cost study were as follows:

- Estimate costs imposed on employers when they have to expand their wage record searches to establish eligibility for ABP claimants,

- Estimate ongoing administrative and data processing costs for employers that are associated with various ABP arrangements, and
- Determine the extent to which different types of employers could report wage credits earlier than they are currently reported and how much earlier they might report within a reasonable cost.

The cost and feasibility of submitting required quarterly data reports using different types of media (paper forms, diskettes, and tapes) were also analyzed.

1.3 METHODOLOGY

The analysis of the impact of ABP on employer operating costs was based on data from Ohio, Vermont, Maine, and Massachusetts. Four sources were used:

- Organizations representing employer interests such as chambers of commerce, Unemployment Benefit Advisors (UBA) and the National Federation of Independent Businesses.
- UI program administrators in states that currently have ABP provisions in place
- Companies that prepare payrolls for clients such as Automatic Data Processing (ADP) and the American Payroll Association (APA)
- Individual employers.

The organizations and people contacted as part of this study are given in Appendix A.

Initially, a series of open-ended interviews were conducted with representatives of employer organizations, UI program administrators, and companies. Some descriptive data on the types of reporting media and time needed to enter wage data into the UI database were obtained during these interviews. However, these sources were unable to provide numerical data that could be used to estimate ongoing administrative and data processing.

Some employer organizations requested a list of questions that they could circulate among their members. A one page questionnaire was prepared and given to UBA and the Associated Industries of Vermont to distribute among their membership. ADP included the questionnaire in their monthly newsletter. Responses were returned to these organizations and delivered to Planmatics. (A copy of the questionnaire is included in Appendix C). State UI agencies in Massachusetts, Ohio, New Jersey, Vermont, and Maine provided the names of the ten largest employers in their states, and copies of the questionnaire were mailed to them.

The findings in this report are based on information derived from the interviews and the responses to the questionnaire. Since the data do not come from a sample developed using statistical techniques, the results presented cannot be defended statistically. The calculations are not intended to provide estimates of national parameters. The data were used to calculate preliminary values for the average time to process a wage request, the average wage of the processor, the average annual cost to employers, and related measures. The information obtained from interviews and questionnaires was also helpful in understanding factors hindering early reporting, the reporting formats used by types and sizes of employers, and the time it takes for wage data to become available in the UI databases.

2. FINDINGS

This section contains discussions on the time and cost of responding to wage requests; the feasibility, costs and benefits of moving the quarterly wage reporting deadline; the different types of wage reporting media as well as the capability of employers to convert to magnetic media for wage reporting; and briefly, the impact of including the current quarter in the alternative base period.

2.1 COSTS OF PROCESSING WAGE REQUESTS

In most states, employers must report quarterly wages by the end of the month following each quarter. These wages are then entered into the automated wage records system of the state

UI agency. When a claim is filed, the determination of monetary eligibility is based on the information in this system. If the necessary information is not available from the wage records system, state UI agencies request this information from employers. Since ABP claims use more recent wage information, they result in wage requests being made more frequently than claims under regular base period provisions.

This section contains a brief description of the increased administrative activities due to wage requests, a summary of questionnaire responses related to the time and the cost of processing a wage request, and a method for computing the increased costs of wage requests due to ABP for all the employers in a state.

Administrative Activities Associated with Wage Requests

Wage requests add to reporting burdens because employers have to search company wage records to find information that will be reported to the state UI agency (or that has already been reported). Employers who use electronic media (tapes and diskettes) for wage reporting must respond to wage requests in writing. The workload of employers reporting wages on paper is increased because the personnel processing these wage requests are often unfamiliar with the forms used.

Information from Employer Organizations

The employer organizations that were contacted were unable to estimate the costs of processing a wage request. Although they did not feel that the cost to employers was excessive, they were concerned that ABP may result in additional paperwork and forms.

Information from Responses to Questionnaires

The responses to the questionnaires provided the following information. (A summary of survey responses is provided in Appendix B).

- The average estimated time needed to process a wage request was approximately 39 minutes. This was the average of 99 responses; the median was 30 minutes, and the

standard deviation was 42.3 minutes. The high standard deviation indicates the large variation in the time estimated. This may be due to the varying levels of computerization of employee wage records and the expertise and experience of personnel processing the wage requests.

- The average wage rate of the person processing such a wage request was $14.27 per hour. This was the average of 101 responses; the median was $13.00, and the standard deviation was $5.20.
- The average estimated cost to process a wage request was $9.76. For each response, the cost was estimated by taking the product of the time to process a wage request and the wage rate of the person processing the request. The average wage rate from 96 responses was $14.27 per hour; the median was $6.32, and the standard deviation was $12.68. This large variance was largely due to the significant variance in the estimated time to process a wage request.

No confidence intervals were calculated for the averages reported here because the sample population was not selected in a manner that would make confidence intervals statistically meaningful.

Given the large variance in the estimated time to process a wage request and the nature of the sample, it is impossible to draw valid statistical conclusions regarding this time. The data were analyzed to determine whether support could be found for the hypothesis that larger companies would estimate lower processing times than small companies. This hypothesis was based on the perception that large employers would have more experience processing wage claims than small employers, large firms are more likely to have computerized record systems, and large employers more frequently employ payroll specialists. As shown in table 4.1 below, the time estimate was indeed lower for larger employers.

Table 2.1 Averages of estimates of the time to process a wage request

Employer size	Small (fewer than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Average time	45 minutes	42 minutes	31 minutes

Source: Responses to employer questionnaires

In small companies, the personnel who processed wage requests, on average, were reported to have higher wage rates than those in medium size and large companies. In small companies, payroll information is handled by employees who are involved in several aspects of the business and thus they may be paid at a higher hourly rate than personnel whose primary function is to handle payroll information. The average wage rates by size of business are shown in Table 4.2.

Table 2.2 Average wage of person processing a wage request

Employer size	Small (fewer than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Average wage rate	$16.36 per hour	$13.17 per hour	$13.36 per hour

Source: Responses to employer questionnaires

For smaller employers, the result of taking longer to process wage requests and paying a higher wage rate than larger companies is a higher average cost. The higher cost is related to small companies having limited access to automated systems for recording and retrieving wages and fewer specially trained personnel.

Table 2.3 Average of estimates of cost to process a wage request

Employer size	Small (less than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Average cost	$12.52	$9.52	$6.89

Source: Responses to employer questionnaires

Method for Estimating the Cost of ABP to Employers

The methodology presented in this subsection for estimating the total cost of wage requests due to ABP to the employers in a state is based on the percentage of ABP claims that result in wage requests and the average cost of processing such a request. Similar computations can be used to estimate these costs in other states.

The percentage of ABP claims that result in wage requests can be estimated by analyzing the time at which wage information becomes available on the automated systems. Only the ABP claims for which complete wage information is not available on the automated systems of the state

UI agency result in wage requests. The availability of wage information depends on several factors, such as:

- The time at which quarterly wage reports are submitted by the employers,
- The time that the state UI agency begins processing wage reports,
- The time required to process the reports received in different media (paper forms, magnetic tapes, computer diskettes), and
- The number of records reported on each type of media.

Since the bulk of the quarterly wage reports are received near the end of the month following the quarter, most of the wage reports become available on the UI system after more than a month following the quarter.

The New Jersey Department of Labor had documented the number of wage records that were available on the automated system at the end of each week for the four quarters of fiscal year 1996. This data was used to estimate the number of ABP claims that would result in wage requests.

The following assumptions were made:

- The New Jersey data represents long term averages.
- ABP claims are received evenly throughout the quarter
- Wage request for information needed for an ABP claim goes to a single employer.

Under these assumptions, the percent of ABP claims that result in wage requests was calculated to be 54% of the total ABP claims. The formula that was used to calculate this number is as follows:

$$\sum_{p=1}^{n} (days_p / days_q) * (1 - Wage\,Records_p / Wage\,Records_q)$$

where:

n is the number of reporting intervals

p is the index of the reporting interval

$days_p$ is the number of days in the reporting interval

$days_q$ is the number of days in the quarter

$WageRecords_p$ is the number of wage records available during the reporting interval

$WageRecords_q$ is the number of wage records entered during the quarter

(These computations are shown in the Appendix C).

In New Jersey, the eligibility of an ABP claim is determined by earnings during the four most recently completed quarters (a lag quarter ABP) or the total earnings during the three most recently completed quarters together with the completed weeks of the current quarter (a current quarter ABP). The total number of lag quarter ABP claims during 1996 was 20,010. This represented 5.7% of all UI claims determined to be eligible. The total cost to all employers of the state of processing the wage requests associated with these claims was estimated to be $105,461. This was calculated by multiplying the number of lag quarter claims (20,010) by the percent of claims resulting in wage requests (54%) and that product by the estimated cost of processing a claim ($9.76).

There were also 5,749 current quarter ABP claims (1.6% of UI claims determined to be eligible). Since wages from the current quarter are needed for these claims, they always result in wage requests. The estimated cost to employers of these wage requests, $56,110, was calculated by multiplying 5,479 by $9.76. The total estimated cost to employers of processing wage requests was $161,571 ($105,461 plus $56,110).

These computations demonstrate the methodology used to estimate costs to employers and are not intended to represent a national average. Using similar data from any state, these computations can be performed to obtain these estimates.

2.2 WAGE REPORTING SCHEDULE

In most states, employers must report quarterly wages within 30 days following the end of the quarter. If the reporting deadline is moved to an earlier date in the month, the number of wage requests would be reduced, thereby decreasing the administrative cost and inconvenience to both the employers and the state UI agency. Massachusetts is the only state that has moved its wage reporting deadline to an earlier date, the 15th of the month following the quarter.

Most employer organizations and employers contacted during the study stated that earlier reporting would be difficult. Employer organizations, employers, payroll and accounting firms have expressed concern to the Massachusetts Department of Revenue (to whom quarterly wages are reported in the state) regarding the difficulties of reporting by the 15th. Some of these difficulties in reporting wages earlier and the percentage and type of employers who are willing to report wages earlier are discussed in the following subsections.

Reasons for Not Being Able to Report Wages Earlier

After the last day of the quarter, employers have to perform several activities to convert their wage records into the format required for reporting. They must:

- Collect and retrieve wage data from wage records,
- Review quarterly payroll, edit records, and correct data,
- Enter wage information on paper forms, magnetic tapes or diskettes,
- Format data on magnetic media according to the specifications of the state UI agency,
- Validate data entered on forms or magnetic media, and
- Mail the wage records.

Following the end of a quarter, frequently wage information must be altered for some of the following reasons:

- Non-cash compensation not calculated, such as the value of:
  - Group term life insurance
  - Group legal services

  - Taxable value of company vehicle
  - Prizes and awards, meals, lodging, and other fringe benefits
- Payments made outside of payroll processing:
  - Termination paychecks
  - Educational assistance
  - Non-accountable expense reimbursements
  - Moving expenses
- Changes that may be necessary after the last day of the quarter include:
  - Retroactive pay increases and
  - Payroll input errors (e.g., wrong hours/earnings)
- Adjustments required for new hires, rehires, and terminated individuals.

Other factors that affect earlier reporting:

- Wage information may not be accurate if it is reported earlier. The corrections that need to be made are mostly on paper and create additional costs and inconvenience to both employers and the state UI agencies. Inaccurate wage reports might result in incorrect monetary determinations, eligibility decisions, or benefit amount calculations. Such errors might necessitate time-consuming remedial measures, such as corrections in wage reports and the appeals process.
- Earlier reporting may result in conflicts with the reporting dates of other states. This is a concern for employers and payroll firms with locations in more than one state.
- Accounting firms, CPAs, and payroll services may have difficulty reporting by April 15 because it coincides with the annual federal personal income tax filing date. Employers using such services may have difficulty getting access to them.
- Third-party sick/disability pay carriers are not required to report payment information about the current year to employers until January 15th of the next year. Payments made by third-party sick pay carriers are reported by employers on quarterly wage reports and annual W-2 forms.

The job of payroll organizations becomes especially difficult because a large number of wage records must be processed within a short time. Their job is complicated by the large number of corrections and amendments in the wage data that occur after the end of the quarter.

Estimates of Employers Who Can Report Earlier

The estimates of the percentage of employers who can report wages earlier than the last day of the month are based on responses to the questionnaires. All the conclusions reported in this subsection are drawn from these responses. (A summary of questionnaire responses is provided in Appendix B).

According to the responses, 59% of employers can report quarterly wages earlier than the last day of the month following the quarter. Of 109 employers who filled out the questionnaire, 45 employers said that they would be unable to report wages earlier than the last day of the month.

An estimated 45% of employers can report quarterly wages by the 15th of the month following the quarter. Of the 107 employers who responded to this question, 59 reported they were not prepared to report by that time.

The average for the least number of days after the end of the quarter by which employers stated they can report quarterly wages is approximately 21 days. This was based on 104 responses.

The readiness to report earlier was found to vary with the number of employees (as summarized in Tables 2.4-2.6).

Table 2.4 Percent of employers who can report quarterly wages earlier than the last day of the month following the quarter

Employer size	Small (fewer than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Percentage who can report earlier than last day of month	84.6%	57.1%	32.1%

Source: Responses to employer questionnaires

Table 2.5 Percent of employers who can report quarterly wages by the 15th of the month following the quarter

Employer size	Small (fewer than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Percentage who can report earlier than 15th of month	73.6%	38.2%	21.4%

Source: Responses to employer questionnaires

Table 2.6 The least number of days after the end of the quarter by which employers can report quarterly wages

Employer size	Small (fewer than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Average of least number of days	16	22.9	25.9

Source: Responses to employer questionnaires

As indicated by the data in the tables, small employers indicate greater readiness to report wages earlier than the last day of the month and by the 15th of the month. Some of the reasons for this are that:

- Small employers have a smaller number of wage records to handle and the total time necessary to process wage records is less. Thus, it is easier for them to report wages earlier than the last day of the month.
- Small employers usually have fewer forms of non-cash compensation, such as group insurance, group legal services, and company automobiles.
- Small employers usually have lower number of payments made out of payroll processing, such as educational assistance, moving assistance, and termination paychecks.
- Few small employers have locations in more than one state. Thus, they do not have to meet different wage reporting deadlines in different states.

In most cases, it is the large employers who find it more difficult to process wage records earlier than the last day of the month.

The Benefit of Earlier Reporting to Employers

If the wage reporting deadline is moved to an earlier date in the month, the number of wage requests and the administrative costs associated with those wage requests would decline. The benefit to employers would depend on how early wages were reported and how quickly the wage records become available on the automated system.

In the earlier subsection, it was estimated that approximately 54% of ABP claims would result in wage requests if the wages were reported at the end of the month following the quarter. This was based on data from New Jersey where wages are reported by the end of the first month following the quarter being reported. If wage reporting were moved to the 15th of the month following the quarter being reported, it is estimated that approximately 42% of ABP claims would result in wage requests. (The computations are shown in the Appendix C).

To develop this estimate, it was assumed that reporting by the 15th of the month would result in data generally becoming available on the automated system 15 days earlier than before. The data from the New Jersey state UI agency were adjusted to reflect this assumption. Three time periods during a quarter were considered: the first two weeks of the month following the end of a quarter, the two weeks between the 15th day of the quarter and the 30th day of the quarter, and the period from the 31st day of the quarter until the end of the quarter. The number of records made available to the system during the first two weeks of the month was assumed to remain the same for reporting by the 15th as reporting by the end of the month. The number of records made available to the system between the 15th and 30th was increased to reflect earlier reporting. The records made available on the 31st day of the quarter were added to the number available on the 16th day. Those from the 32nd day were added to the 17th day and so on. The increases were subject to the constraint that a maximum of 125,000 records per day can be uploaded to the automated system. If the maximum was exceeded for any period, the number of

records was reduced to the maximum for the period and the number of records in the next period was increased accordingly. Records made available from the 46th day on (the last six weeks of the quarter) were moved up two weeks.

If the reporting deadline were moved to the 15th of the month, it is estimated that the decrease in the number of wage requests due to ABP would be 22%.

Moving the reporting deadline, then, would save employers 22% of these costs for processing wage requests for lag quarter ABP claims. Based on the estimate of $105,461 as the total cost due to lag quarter ABP to all employers of the state, savings would be approximately $23,436.

However, wages that are reported earlier are more likely to contain errors and these savings do not take into account the costs of amending records reported incorrectly. Thus, estimated savings could be reduced or eliminated.

2.3 TYPES OF WAGE REPORTING

Methods Commonly in Use

- Paper forms: Paper forms are the most common media for reporting wages. They also are the most cumbersome because of the additional filing and processing time required. Errors by both the employers and the state UI agency are more frequent with paper forms than other media. Currently this type of wage reporting is the only option for many small employers who do not have access to computers or the equipment needed to report wages on magnetic media.
- Magnetic tapes and cartridges: Magnetic tapes and cartridges are widely used in most states. In most cases, the use of this type of media is a requirement for large employers. Wage information stored in magnetic tapes and cartridges is transferred to the automated wage record system of the state UI agency faster than information recorded on paper forms.

- Computer diskettes: Many states have begun using computer diskettes as a medium for wage reporting. Like magnetic tapes, the information on computer diskettes can be processed and made available more quickly than the information from paper forms. The transfer of information is less susceptible to error than data entry from paper forms. Although they currently have smaller capacities than magnetic tapes, advances in technology will produce computer diskettes with data capacity comparable or greater than that of magnetic tapes. Due to the expansion of personal computers in business, diskettes are common format available to many. Since a wide variety of payroll software is available, state UI agencies should specify a data format and provide software for reporting wages.

New Methods of Wage Reporting

- Electronic Data Interchange (EDI): EDI is a subset of Electronic Commerce (EC) and was first used by railroads to coordinate shipping of goods. EDI is used to exchange information within an organization and with other organizations in areas that include manufacturing, healthcare, education, finance, trade, and transportation. EDI has been used successfully in the UI community as well. Texas has had an active EDI program for several years. The advantage of EDI is the almost instantaneous transfer of information compared with the mailing and handling time required for paper forms, tapes, and diskettes. Since EDI is often fundamental to large companies, the costs associated with this system are negligible compared to the great savings in labor generated in a short time. Small companies are reluctant to implement EDI because of its high startup costs. Several states give businesses the option of using EDI to report certain data, including sales and motor fuel data. Only a small percentage of employers have EDI capabilities, which depend on EDI costs and the industry type. Although some state UI agencies are looking into EDI as a fast medium for reporting wages, none of agencies that were contacted is currently using EDI.
- The Internet: The Internet is being used increasingly in business settings to exchange information. The Internet provides a fast and cheap medium for exchanging data and information and is accessible to a large number of employers. However, there are still issues regarding the security and privacy of data. Before the Internet becomes a viable method for reporting wages, the security of the data transmitted must be guaranteed. Without security

measures, the Internet is an unsafe and unreliable environment. Recent advances in the use of encryption will help to solve the security issue, but will not address problems with messages that are lost in transmission. There is a need to develop processes for auditing messages to ensure that data have been received. None of the state UI agencies that were contacted use the Internet to report wages. However, Internet will likely become a principal means of exchanging information in the future, and state UI agencies should be prepared to take advantage of this medium when it becomes more mature and reliable.

- Telephone Bulletin Board Systems (BBS): This type of system consists of a modem-equipped computer that runs a special BBS software and telephone lines to support the anticipated call volume. Users dial into this computer with modem-equipped computers. BBS systems are often used as sources of information and data collection. They enable users to exchange files, communicate with each other through e-mail, become involved in live on-line discussions, and use news groups. In summary, BBSs provide users with capabilities similar to those of Internet, but in a smaller, closed environment. BBSs are cost effective only when the number of simultaneous connections required is small. In the case of a large employer that needs a large number of lines and modems, BBS systems may become quite costly. A small employer may find the use of BBS efficient and cost effective. One major drawback of using them is the difficulty of obtaining technical support. Nevertheless, BBSs are and will continue to be useful in providing a basis for inexpensive, easy-to-use data systems. The Utah Department of Employment Security and the Texas Employment Commission use BBSs for collecting data from and disseminating information to employers. None of the states that were contacted for this study used a BBS system as a medium of wage reporting.

Percentage of Wages Reported Using Various Media

The media used for reporting at present are limited to paper forms, magnetic tapes/cartridges, and diskettes. Information for four states provided by the state UI agencies is shown in Table 2.7-2.10.

Table 2.7 Reporting media in Ohio

Reporting format	Requirement for employers having	Number of employers	Number of wage records	Percentage
Magnetic tapes	more than 250 employees	23,500	2,700,000	39.7
Diskettes	more than 20 and less than 250 employees	3,000	1,000,000	14.7
Paper forms		203,000	3,100,000	45.6

Source: Ohio Bureau of Employment Services

Table 2.8 Reporting media in Massachusetts

Reporting format	Requirement for	Number of employers	Percent of wage records
Magnetic tapes and cartridges	more than 250 employees	22,000	63.6
Paper forms		143,000	36.4

Source: Massachusetts Department of Employment and Training

Table 2.9 Reporting media in Maine

Reporting format	Percentage
Magnetic tapes and cartridges	50-60
Paper forms	40-50

Source: Maine Department of Labor

Table 2.10 Reporting media in New Jersey

Reporting format	Requirement for	Percentage
Magnetic tapes, cartridges & diskettes	>99 employees	65
Paper forms (scannable)		15
Paper forms (to be keypunched)		20

Source: New Jersey Department of Labor

The tables show that between 50% and 65% of wages are reported using magnetic media in all four states. Paper forms are used for between 35% to 50% of wage reporting in all four states.

The data in the tables was reported by the individual state UI agencies. The questionnaire provided a second source of information on the types of reporting media used by employers. The responses were compiled by size of employer to determine whether the data supported the

hypothesis that smaller employers rely more heavily on paper form reporting than large employers. A much larger percentage of small employers who responded to the questionnaire reported wages on paper forms (see Table 2.11). This is mainly because:

- Many state UI agencies require employers above a certain size (in terms of number of employees) to report wages using magnetic media.
- Many small employers do not have the capability of using magnetic media because of lack of hardware and/or technical expertise.
- Larger employers prefer to use magnetic media because it is a more efficient way to handle large amounts of information and the error rate is much lower.

The results are summarized in Table 2.11.

Table 2.11 Media used in reporting quarterly wages

Employer size	Small (fewer than 500 employees)	Medium (between 501 and 10,000 employees)	Large (more than 10,000 employees)
Reporting by paper forms	69.2%	14.3%	34.6%
Reporting by tapes	17.9%	85.7%	88.5%
Reporting by diskettes	2.6%	11.4%	15.4%
Reporting by other means	12.8%	2.9%	11.5%

Source: Responses to employer questionnaires
Note: The columns in this table do not add to 100% because employers may use more than one media.

Processing Time Using Different Media

For wages reported on paper, it may take as much as eight weeks to become available on the Massachusetts Department of Employment & Training database, while wages reported on tapes or cartridges become available after about three weeks. In Ohio, the processing of wage reports is completed nine weeks after the end of the month. Reports on tape are processed first and take about one week. The data on diskettes is entered next and takes about two weeks. Finally, the manual entry of data from paper forms takes approximately nine weeks to complete.

Although other states could not provide reliable estimates of the time required to process wage reports submitted on paper and magnetic media, officials of state UI agencies reported that

paper forms take much longer to process than magnetic media. Paper forms are also more labor intensive and result in larger processing costs than magnetic media.

Conversion from Paper Forms to Magnetic Media

Since wages reported using magnetic media become available on the state UI system sooner than those reported on paper, converting from paper forms to magnetic media will reduce the number of wage requests. This will decrease the costs for both state UI agencies and employers. Because it is less time consuming to process data from magnetic media than from paper forms, the state UI agencies will also realize savings in data entry costs.

On the basis of the responses to the questionnaires, approximately 71% of employers who currently use paper forms stated that they could convert to an electronic format (tapes, diskettes or EDI) within a reasonable cost.

Many small employers can easily convert to using diskettes. However, state UI agencies should provide reporting software that the employers can easily format and use according to the requirements of the state UI agency.

Cost Savings from Reporting on Magnetic Media

The same methodology that was used to estimate the cost of ABP to employers was used to estimate ABP claims that would result in wage requests if all wage records were reported on magnetic media. The New Jersey data were again used to calculate this percent. Only the data for wage records reported on magnetic media were used for WageRecords_p and WageRecords_q. It was assumed that the rate at which records currently reported on magnetic media become available represents the rate records would become available if all reporting were done on this medium. The formula that follows was used to do this calculation.

$$\sum_{p=1}^{n} (days_p / days_q) * (1 - WageRecords_p / WageRecords_q)$$

where:

n is the number of reporting intervals

p is the index of the reporting interval

$days_p$ is the number of days in the reporting interval

$days_q$ is the number of days in the quarter

$WageRecords_p$ is the number of wage records available during the reporting interval

$WageRecords_q$ is the number of wage records entered during the quarter

If magnetic media exclusively were used for reporting wages, wage requests would be reduced from 54% of all ABP claims to 44%, approximately a 19% decrease. In New Jersey, this would have translated into a cost savings for employers of approximately $19,530 in the cost of processing wage requests related to lag quarter ABP claims. In addition to the employer savings, the state UI agencies will also realize significant savings from reductions in the time spent processing wage records. (The computations are shown in the Appendix C).

2.4 INCLUDING THE CURRENT QUARTER IN ABP PROVISIONS

In most states that have ABP provisions, the alternative base period is the first four of the last five completed calendar quarters. Some states include the current quarter in the alternative base period. Vermont provides for two alternative base periods. If a claimant in Vermont is not eligible under the regular base period and the first alternative base period (the last four completed quarters), then eligibility is based on earnings in the second alternative base period (the last three completed quarters and completed weeks in the current quarter). In Massachusetts, the regular base period consists of the last four completed quarters, and the alternative base period consists of the last four completed quarter plus any completed weeks in the current quarter.

Although including the current quarter increases the population of claimants who become eligible for UI payments, it also increases the administrative burden and costs to both employers and state UI agencies. Wage information for the current quarter is never available in the state UI agencies' database because wages are only reported after the end of a quarter. Thus,

determinations using wages in the current quarter always result in wage requests. The methods and options discussed in sections 4.1,4.2 and 4.3 will not decrease the number of wage requests when the alternative base period includes the current quarter. This is because these methods will only make the wages of the last four completed quarters available earlier on the state UI agencies' database.

In addition to the increased administrative costs due to wage requests, the experience-rated taxes of the employer may increase because of the increased possibility of claimants becoming eligible for UI payments. This issue is discussed in greater detail in the report on the effects of ABP on UI trust funds.

3. SUMMARY AND CONCLUSIONS

Employers incur administrative costs due to ABP in responding to wage requests because ABP claims use wage information that often is not available on state UI databases when the claim is filed. The average time spent by an employer in processing a wage request is approximately 39 minutes, and the average processing cost to the employer is $9.76. Typically, it takes a small employer longer to process a single wage request than a large employer because larger employers use automated wage recording and retrieving systems and specialized payroll personnel. In New Jersey, an estimated 54% of lag quarter ABP claims and all current quarter ABP claims result in wage requests. The total cost of responding to ABP wage requests is an estimated $161,571 for all the employers in New Jersey.

The number of wage requests can be reduced by having an earlier deadline for reporting wage information and using a more efficient reporting media. If the reporting deadline were moved to an earlier day of the month following the end of a quarter, wage information would be available in the state UI databases earlier, allowing more ABP eligibility determinations to be made without wage requests. However, it is difficult and sometimes not feasible for many employers to report wages earlier because of the activities required to format the information, make amendments, and correct errors. Approximately 59% of the employers who responded to the questionnaire said that their companies would be capable of reporting wages earlier than the last day of the month. Only 45% said their companies had the capability to report by the 15th of the month. Of the employers who indicated that earlier reporting was feasible, small employers expressed greater capability than large employers to report wages earlier. This may be because they have to report wages for fewer employees.

Moving the reporting deadline to the 15th of the month would reduce the number of requests by an estimated 22%. However, the potential savings do not appear large enough to justify this step.

The media used to report wage information each month affect UI agencies and employer costs in several ways--through the timeliness with which the information is available on the UI database, the time and labor required to prepare and enter the information, and the accuracy of this information.

The most common media used for reporting wages are paper forms, magnetic tapes/cartridges, and computer diskettes. Magnetic media are used for 50% to 65% of wage reports in most states, while paper forms are used for 35% to 50%.

In many states, large employers are required to report wages on magnetic media. Thus, it is primarily the smaller employers who use paper forms. However, it takes three to six weeks longer to enter wage information from paper forms into the UI database than information submitted on magnetic media. If companies using paper forms converted to magnetic media, the number of wage requests would decrease by an estimated 19% (this percentage is for one state only, but the methodology can be used to obtain estimates for the other states).

With computers becoming increasingly common, many employers have the capability to convert to magnetic media. Seventy one percent of those currently reporting wages on paper indicated in their response to the questionnaire that they can convert to magnetic media. However, state UI agencies will encounter resistance to making wage reporting on magnetic media a requirement because many small employers still lack such capability.

The two methods of reducing the number of wage requests, (1) accelerating reporting deadlines, and (2) requiring all employers to report wages on magnetic media, would be difficult to implement because of the obstacles and the inconvenience to employers. A method that may be more acceptable to employers is a combination of the two. State UI agencies could require wage information on paper forms to be reported earlier than the last day of the month (e.g., the 15th), while maintaining the current reporting deadline for wages reported on magnetic media (i.e., the last day of the month). Such a method would give small employers the option of either reporting earlier on paper forms or later using magnetic media, accomplishing the objective of

expedited availability of wage information without appearing to be discriminatory or unduly burdensome to employers.

In some states, the alternative base period includes the current quarter. Wage information for this quarter is never available on the state UI agencies' database because wages are only reported after the end of the quarter. Thus, eligibility determinations using wages in the current quarter always result in wage requests. The methods and options for reducing the costs to employers summarized here will not lower wage request costs when the alternative base period includes the current quarter.

APPENDIX

Appendix A, Part I
List of personnel in employer organizations and state UI agencies that were contacted

Maine

Christine Hastedt, Pine Tree Legal Assistance

James McGruder, Maine Merchants Association

Peter M. Gore , Maine Chamber of Commerce & Industry

Stephen C. Clarkin, International Paper

Maine Department of Labor Officials, Laura Boyette, Howard Butler, Gail Thayer, Betty Wotts

Massachusetts

Richard C. Lord, Associated Industries, Massachusetts

Stephen P. Camuso, Unemployment Services Corporation

John Boyle, City, Boston

Peter Isberg, Carlisle S. Bascom and Kris Morrison, ADP

Massachusetts Department of Employment & Training Officials, William Sullivan, Nils Nordberg

Ohio

Dan Naven, Ohio Chamber of Commerce

Larry Stelzer, Retail Merchants

John P. Davidson, Esq., Chrysler Corporation

Ohio Bureau of Employment Services Officials, Barbara Chandler, Doug Holmes, Bob Welsh, Jim Hemmerly, John Anderson

Vermont

Chris Barbieri, Vermont Chamber of Commerce

Paul Smith, Vermont Retail Association

Sandra Dragon and Kerrick Johnson, Associated Industries of Vermont

Thom Serrani, Associated General Contractors

D. Thomas Cosgrove, Tricoastal Consulting, Ltd.

Vermont Department of Employment & Training Officials, Thomas Douse, Claire Coutoure, Pat McCabe and Dave Tupper

Others

J. Eldred Hill, III, UBA, Inc.

John Roming, National Federation of Independent Business, Inc.

William Petz, Rita Zidner and Marcie Friedle, American Payroll Association

Warren Blue, Coalition for Unemployment Compensation Tax Reform

Debra Salam, Payroll Support Associates

Appendix A, Part II
List of employers who provided information

A&P
Acme Markets, Inc.
Albany Ladder Company
Alcoa
Asbury Park Press, Inc.
Atlantic City Hilton
Atlantic City Showboat
Atlantic Energy
Frigidaire
Automated Equipment
Bally's Park Place
Bath Iron Works Corporation
Beneficial Management
Boardwalk Regency Corporation
Bob Evans Farms
Boeing
Boise Cascade Corporation
Borden, Inc.
Burroughs-Ross-Colville Company
Chrysler Corporation
Claridge Casino Hotel
CLM Corporation
Cortrim Hardwood Parts
County of Kern
CPC International
Cutler Magner Company
Davis Industries
DeBrino Caulking
Deere & Company
Dial Corporation
Dow Jones & Company, Inc.
DuPont
F.E. Hale Manufacturing Company
F.J. Ryan & Sons
Federal Express
Federated Department Stores
Fixture World, Inc.
Fletcher Allen Health Care
Ganem Contracting Corporation
Gateway
GEC-Marconi Hazeltine Corporation
General Motors

Georgia-Pacific
Gibbens Company
Gilded Mirrors, Inc.
Hannaford Brothers Company
Harrah's Casino
Hertz Corporation
IBM Corporation
Iriquois Pipeline
Jeffrey Chain
John DiGiulio, Inc.
Kelly Services, Inc.
Lockheed Martin Corporation
Marriott International
McGraw-Hill Companies
McNamee, Luchner
Mechanical Testing, Inc.
Merrill Lynch
Middlebury College
MTD, Inc.
NJ Manufacturers Insurance Company
Novartis
OCMMC
Plaza Personnel, Inc.
Price Chopper Operating Company of Vermont, Inc.
Prime Hospitality Corporation
Public Service Enterprise Group
Quest Diagnostics, Inc.
Quik Drive USA Inc.
Regalo: A Gift Experience
Rhone-Poulenc, Inc.
Rickel Home Centers
Rochester Management, Inc.
Simon & Schuster
Thrift Drug, Inc.
Transformer Engineering
Trump's Castle
Trump Plaza Association
United Parcel Service
USX Corporation
Utica First Insurance Company
Vestal Manufacturing Company
Vibratech, Inc.
Warner Lambert
Weyerhauser Company
WORC

Appendix B, Part I
QUESTIONNAIRE TO DETERMINE THE EFFECTS OF ABP ON EMPLOYERS

Company name (*optional*): _____ Company business: _____

Number of employees: _____ Business city and state: _____

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1. **Wage Requests**: If the wage information of the Unemployment Insurance (UI) claimant is not available on automated records of the state unemployment insurance (UI) agency or if it is disputed, the state UI agency requests such information from the employers .

a) Please provide an estimate of the time it takes to process such a wage request: _____

b) What is the wage rate of the person processing such a wage request (in $/hour): _____

---

2. **Quarterly Wage Reporting:** Quarterly wages must be reported to the state UI agency by the last day of the month that follows the end of the quarter (in all the states except Massachusetts).

a) Can you report quarterly wages earlier than the last day of the month? Circle one. Yes No

If your response to the question **2.** a) was "No.", then give the reason(s) for not being able to report quarterly wages earlier than last day of the month.

_____

_____

If your response to the question **2.** a) was "Yes.", then please answer the following questions:

b) Can you report wages by the 15th of the month following the quarter. Yes No

c) What is the least number of days after the end of the quarter in which you can report quarterly wages? _____

d) Provide an estimate of the additional cost of reporting quarterly wages earlier than the last day of the month: _____

---

3. **Method of Quarterly Wage Reporting**

a) By which of the following means do you report quarterly wages ? Circle one

i)Paper Forms ii) Tapes iii) Diskettes iv) Other, please specify _____

If your response to the previous question was " i) Paper Forms", then please answer the following questions:

b) Can you convert to an electronic format of wage reporting (tapes, diskettes or EDI)? _____

c) Provide an estimate of the cost of such a conversion: _____

---

4. **Payrolling Services**

a) Do you use a payrolling service? Circle one. Yes No

---

5. If you have any comments about the alternative base period and its effect on your organization, or an issue related to any of the above questions, please include them in the space below.

_____

Name (*optional*): _____ Title: _____ Date: ___/___/___

Appendix B, Part II
EFFECT OF ABP ON EMPLOYERS: SUMMARY OF RESPONSES TO QUESTIONNAIRE

OVERALL RESULTS

Total number of responses: *116*

1. **Wage Requests**: If the wage information of the Unemployment Insurance (UI) claimant is not available on automated records of the state unemployment insurance (UI) agency or if it is disputed, the state UI agency requests such information from the employers .

Estimate of the time it takes to process a wage request: *39.1 minutes (Average of 99 responses)*

The wage rate of the person processing such a wage request (in $/hour): *$ 14.27 (Average of 101 responses)*

Estimate of the cost to process a wage request: *$9.76 (Average of 96 responses)*

2. **Quarterly Wage Reporting:** Quarterly wages must be reported to the state UI agency by the last day of the month that follows the end of the quarter (in all the states except Massachusetts).

Percentage of employers who can report quarterly wages earlier than the last day of the month following the quarter: *58.7% (Based on 109 responses: 64 able to report earlier, 45 unable to report earlier)*

Percentage of employers who can report quarterly wages by the 15th of the month following the quarter: *45% (Based on 107 responses: 48 able to report by the 15th , 59 unable to report by the 15th)*

The least number of days after the end of the quarter by which employers can report quarterly wages: *21.1 days (Average of 104 responses)*

3. **Method of Quarterly Wage Reporting**

The means of reporting quarterly wages

Paper Forms	Tapes	Diskettes	Other
42	*65*	*10*	*9*
39.3%	*60.7%*	*9.3%*	*8.4%*

(Based on 107 responses, some employers use more than one method of reporting quarterly wages)

Percentage of employers who currently report using paper forms and can convert to an electronic format of wage reporting (tapes, diskettes or EDI): *71.4% (based on 25 out of 35 responses)*

RESULTS BY SIZE OF EMPLOYER

Classification of employer types and the number of questionnaire responses received.

Employer Type	Small	Medium	Large
Number of employees	<500	Between 500 and 10,000	>10,000
Number of responses	42	35	28

1. **Wage Requests**: If the wage information of the Unemployment Insurance (UI) claimant is not available on automated records of the state unemployment insurance (UI) agency or if it is disputed, the state UI agency requests such information from the employers .

Estimate of the time it takes to process a wage request (in minutes)

Employer Type	Small	Medium	Large
Average time	44.90	42.11	31.20
Number of responses	39	28	23

The wage rate of the person processing such a wage request (in $/hour)

Employer Type	Small	Medium	Large
Average wage rate	$ 16.36	$ 13.17	$ 13.36
Number of responses	40	30	22

Estimate of the cost to process a wage request

Employer Type	Small	Medium	Large
Average Cost	***$12.52***	***$9.52***	***$6.89***
Number of responses	39	26	22

2. **Quarterly Wage Reporting:** Quarterly wages must be reported to the state UI agency by the last day of the month that follows the end of the quarter (in all the states except Massachusetts).

Employers who can report quarterly wages earlier than the last day of the month following the quarter

Employer Type	Small	Medium	Large
Able	33	20	9
Unable	6	15	19
Percentage who can report earlier than last day of month	84.6%	57.1%	32.1%

Employers who can report quarterly wages by the 15th of the month following the quarter

Employer Type	Small	Medium	Large
Able	28	13	6
Unable	10	21	22
Percentage who can report earlier than 15th of month	73.6%	38.2%	21.4%

The least number of days after the end of the quarter by which employers can report quarterly wages

Employer Type	Small	Medium	Large
Average of least number of days	16	22.9	25.9
Number of responses	38	32	27

3. Method of Quarterly Wage Reporting

The means of reporting quarterly wages

Employer Type	Small	Medium	Large
Reporting by Paper Forms	69.2% (27)	14.3% (5)	34.6% (9)
Reporting by Tapes	17.9% (7)	85.7% (30)	88.5% (23)
Reporting by Diskettes	2.6% (1)	11.4% (4)	15.4% (4)
Reporting by Other means	12.8% (5)	2.9% (1)	11.5% (3)
Number of responses	39	35	26

(Some employers use more than one method of reporting quarterly wages)

Wage Reporting Deadlines may be Accelerated

One of the fundamental concepts in unemployment insurance is that claimants must demonstrate an "attachment to the labor force" to qualify for benefits. Otherwise, U.I. trust funds might be drained by individuals that you wouldn't consider unemployed (such as students looking for their first job). To qualify for benefits, claimants must typically have earned a certain amount in a "base period", usually the "first four of the last five completed calendar quarters".

> For example, under this rule the base period for someone filing a claim in July, 1995 would be the four calendar quarters ending on March 31, 1995.

It is this base period which allows most state employment security agencies to verify wages by accessing the quarterly wage information that is filed by employers, rather than asking employers to supply wage information for each claim filed.

However, a recent 7th Circuit Court of Appeals decision (Pennington vs. Didrickson) ruled that unemployment claimants who do not have enough wages in the standard base period to qualify for benefits are entitled to an "alternate base period". The Advisory Council on Unemployment Compensation also agreed with the concept of a "movable base period in cases in which its use would qualify a claimant..."[1] Some states[2] have already passed laws to implement alternate base periods.

In the example of the person claiming unemployment benefits in July, the agency might need to determine wage amounts paid ***through June 30,*** which is often not available to the agency until mid-August. In all but two states, employers have until the 30th or 31rst of the month following each calendar quarter to file wage reports.

Where does this leave the payroll professional? Possibly responding to lots of requests for wage information. Accelerating the due date for quarterly wage reports, which is one possibility, would be extremely difficult for the millions of payroll departments across the states. Massachusetts accelerated their wage report due date to the 15th of the month following each quarter (i.e., 4/15/95 for the quarter ending 3/31/95). Will other states follow?

The U.S. Department of Labor has commissioned a study of the feasibility of administering U.I. benefits under the "alternate base period"; including the feasibility of accelerating quarterly wage report deadlines. If you have any information about how your company would be affected, please fax that information to Saurabh Mittal, of PLANMATICS Inc. at (301) 571-9123, or mail it to the company at 6500 Rock Spring Drive, Suite 420, Bethesda, MD 20817. Be sure to include the name and phone number of a person who may be contacted for additional information. PLANMATICS, Inc. is conducting the study and needs as much employer input as possible! Of course, APA will be monitoring this situation closely in the future.

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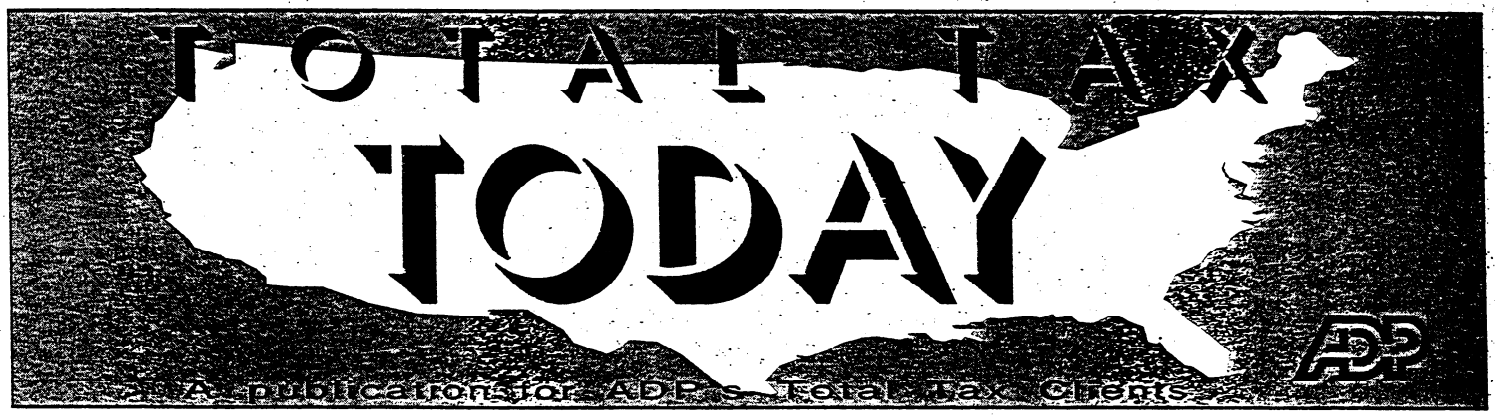
1. Unemployment Insurance in the United States: Benefits, Financing, Coverage: The Advisory Council on Unemployment Compensation, Washington, D.C. February 1995, page 17.

2. The states that have already passed laws to implement an alternate base period include Maine, Massachusetts, New Jersey, Ohio, Rhode Island, Vermont, and Washington.



Appendix C

Table 1: Calculation of percentage of ABP claims that result in wage requests for 2nd quarter , 1996

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	4	-	0%	0%	4.4%
2	8	46,756	1%	1%	8.7%
3	7	39,149	1%	2%	7.5%
4	7	121,877	3%	5%	7.3%
5	8	505,551	13%	18%	7.2%
6	6	646,746	16%	34%	4.3%
7	8	726,337	18%	53%	4.2%
8	6	526,477	13%	66%	2.3%
9	14	459,464	12%	77%	3.5%
10	7	498,684	13%	90%	0.8%
11	7	198,370	5%	95%	0.4%
12	7	112,490	3%	98%	0.2%
13	2	87,016	2%	100%	0.0%
Totals	$days_q$ = 91	$WageRecords_q$=3,968,917	100%		**51%**

Table 2: Calculation of percentage of ABP claims that result in wage requests for 3rd quarter , 1996

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	5	-	0%	0%	5.4%
2	7	13,386	0%	0%	7.6%
3	7	20,018	0%	1%	7.5%
4	12	112,171	3%	4%	12.6%
5	9	660,282	16%	20%	7.9%
6	7	1,009,077	25%	44%	4.3%
7	7	698,157	17%	61%	3.0%
8	7	609,899	15%	76%	1.8%
9	7	427,992	10%	86%	1.0%
10	7	154,222	4%	90%	0.8%
11	7	190,365	5%	95%	0.4%
12	7	125,486	3%	98%	0.2%
13	3	90,519	2%	100%	0.0%
Totals	$days_q$ = 92	$WageRecords_q$=4,111,,574	100%		**52%**

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Table 3: Calculation of percentage of ABP claims that result in wage requests for 4th quarter , 1996

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	4	-	0%	0%	4.3%
2	7	48,286	1%	1%	7.5%
3	7	87,994	2%	3%	7.4%
4	7	94,605	2%	6%	7.2%
5	14	469,144	12%	17%	12.6%
6	7	736,616	18%	35%	4.9%
7	7	494,122	12%	48%	4.0%
8	8	610,470	15%	63%	3.2%
9	6	233,790	6%	69%	2.1%
10	7	567,808	14%	83%	1.3%
11	7	484,428	12%	95%	0.4%
12	11	134,843	3%	98%	0.3%
13	6	86,590	2%	100%	0.0%
Totals	$days_q$ = 92	$WageRecords_q$=4,048,696	100%		**55%**

Table 4: Calculation of percentage of ABP claims that result in wage requests for 1st quarter, 1997

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	10	-	0%	0%	11.1%
2	7	100,648	2%	2%	7.6%
3	7	128,183	3%	6%	7.3%
4	7	116,569	3%	8%	7.1%
5	7	317,091	8%	16%	6.5%
6	7	683,254	16%	32%	5.3%
7	7	542,552	13%	46%	4.2%
8	7	229,322	6%	51%	3.8%
9	7	529,992	13%	64%	2.8%
10	7	707,228	17%	81%	1.5%
11	7	368,530	9%	90%	0.8%
12	10	218,443	5%	95%	0.5%
13	0	204,463	5%	100%	0.0%
Totals	$days_q$ = 90	$WageRecords_q$=4,146,275	100%		**59%**

Appendix C

Table 5: Summary of Tables 1,2,3 & 4

Quarter	% of ABP claims that result in wage requests
2nd quarter , 1996	50.7%
3rd quarter , 1996	52.4%
4th quarter, 1996	55.2%
1st quarter, 1997	58.6%
Average	**54%**

Appendix C

Table 6: Calculation of percentage of ABP claims that result in wage requests if reporting deadline is moved to the 15th (2nd quarter , 1996)

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	4	-	0%	0%	4.4%
2	8	46,756	1%	1%	8.7%
3	7	39,149	1%	2%	7.5%
4	7	526,093	13%	15%	6.5%
5	8	875,000	22%	37%	5.5%
6	6	1,000,000	25%	63%	2.5%
7	8	620,979	16%	78%	1.9%
8	6	284,962	7%	85%	1.0%
9	14	206,440	5%	91%	1.4%
10	7	292,190	7%	98%	0.1%
11	7	67,679	2%	100%	0.0%
12	7	9,668	0%	100%	0.0%
13	2		0%	100%	0.0%
Totals	$days_q$ = 91	$WageRecords_q$=3,968,917	100%		**40%**

Table 7: Calculation of percentage of ABP claims that result in wage requests if reporting deadline is moved to the 15th (3rd quarter , 1996)

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	5	-	0%	0%	5.4%
2	7	13,386	0%	0%	7.6%
3	7	20,018	0%	1%	7.5%
4	12	558,577	14%	14%	11.2%
5	9	1,500,000	36%	51%	4.8%
6	7	1,092,151	27%	77%	1.7%
7	7	388,882	9%	87%	1.0%
8	7	159,385	4%	91%	0.7%
9	7	181,097	4%	95%	0.4%
10	7	116,611	3%	98%	0.2%
11	7	63,363	2%	100%	0.0%
12	7	18,104	0%	100%	0.0%
13	3		0%	100%	0.0%
Totals	$days_q$ = 92	$WageRecords_q$=4,111,,574	100%		**41%**

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Table 8: Calculation of percentage of ABP claims that result in wage requests if reporting deadline is moved to the 15th (4th quarter , 1996)

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	4	-	0%	0%	4.3%
2	7	48,286	1%	1%	7.5%
3	7	87,994	2%	3%	7.4%
4	7	305,067	8%	11%	6.8%
5	14	855,425	21%	32%	10.3%
6	7	1,273,689	31%	63%	2.8%
7	7	204,566	5%	69%	2.4%
8	8	637,012	16%	84%	1.4%
9	6	453,751	11%	95%	0.3%
10	7	104,188	3%	98%	0.1%
11	7	55,103	1%	99%	0.0%
12	11	23,615	1%	100%	0.0%
13	6		0%	100%	0.0%
Totals	$days_q$ = 92	$WageRecords_q$=4,048,696	100%		**43%**

Table 9: Calculation of percentage of ABP claims that result in wage requests if reporting deadline is moved to the 15th (1st quarter, 1997)

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/Wage$
1	10	-	0%	0%	11.1%
2	7	100,648	2%	2%	7.6%
3	7	316,388	8%	10%	7.0%
4	7	779,723	19%	29%	5.5%
5	7	724,298	17%	46%	4.2%
6	7	272,275	7%	53%	3.7%
7	7	555,311	13%	66%	2.6%
8	7	658,843	16%	82%	1.4%
9	7	347,089	8%	91%	0.7%
10	7	207,683	5%	96%	0.3%
11	7	143,124	3%	99%	0.1%
12	10	40,893	1%	100%	0.0%
13	0		0%	100%	0.0%
Totals	$days_q$ = 90	$WageRecords_q$=4,146,275	100%		**44%**

Appendix C

Table 11: Calculation of percentage of ABP claims that result in wage requests if all employers use magnetic media for wage reporting

Period # (p)	# of days in the period ($days_p$)	# of wage records added at the beginning of period	% of wage records added at the beginning of each period	% of wage records available at the beginning of each period ($WageRecords_p/WageRecords_q$)	% of ABP claims that result in wage requests during the period $[(days_p/days_q)(1-WageRecords_p/WageRecords_q)]$
1	4	-	0%	0%	4.4%
2	8	28,059	1%	1%	8.7%
3	7	30,701	1%	2%	7.5%
4	7	106,686	4%	6%	7.2%
5	8	461,792	17%	22%	6.8%
6	6	611,998	22%	44%	3.7%
7	8	661,671	24%	68%	2.8%
8	6	457,587	16%	84%	1.0%
9	14	116,820	4%	89%	1.8%
10	7	238,361	9%	97%	0.2%
11	7	22,904	1%	98%	0.2%
12	7	26,360	1%	99%	0.1%
13	2	31,991	1%	100%	0.0%
Totals	$days_q$ = 9	$WageRecords_q$=2,794,930	100%		**44%**